

Appendix A: Glossary of Abbreviations, Acronyms, and Terms

This appendix lists and describes the acronyms and abbreviations used in the handbook.

Item	Meaning	Item	Meaning
AAA	Anti-Aircraft Artillery	DME	Distance Measuring Equipment
AAF	Army Air Field	DSN	Defense Switching Network
ACM	Air Combat Maneuvering	ECM	Electronic Counter Measures
AFB	Air Force Base	ECR	Electronic Combat Range
AFFS	Army Flight Following Service	EW	Electronic Warfare
AFFTC	Air Force Flight Test Center	FAA	Federal Aviation Administration
AGGR	Air to Ground Gunnery Range	FAR	Federal Air Regulation
AGL	Above Ground Level	FL	Flight Level
ALTRV	Altitude Reservation	FLIP	Flight Information Publication
ANG	Air National Guard	GCI	Ground Control Intercept
ARM	Anti-Radiation Missile	GP	General Planning
ARTCC	Air Route Traffic Control Center	HATR	Hazardous Air Traffic Report
ARU	Airborne Radar Unit	I&M	Improvement and Modernization
ASC	Airspace Surveillance Center	IASO	Installation Aviation Safety Officer
ATC	Air Traffic Control	IAW	In accordance with
ATCAA	Air Traffic Control Assigned Airspace	IFR	Instrument Flight Rules
ATO	Air Tasking Order	JPPB	Joint Policy and Planning Board
AWACS	Airborne Warning and Control System	LOA	Letter of Agreement
BFM	Basic Fighter Maneuvers	MOA	Military Operations Area
CAS	Close-Air Support	MRU	Military Radar Unit
CCB	Complex Control Board	MSL	Mean Sea Level
CCF	R-2508 Central Coordinating Facility	MTR	Military Training Route
CFA	Controlled Firing Area	NACC	NTC Airspace Control Center
DoD	Department of Defense		

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Item	Meaning	Item	Meaning
NAS	Naval Air Station		Test, and Evaluation
NAWCWPNS	Naval Air Warfare Center, Weapons Division	ROA	Remotely Operated Aircraft
NAWS	Naval Air Weapons Station	RTB	Return to Base
NM	Nautical Miles	RWR	Radar Warning Receiver
NMAC	Near Mid-Air Collision Report	SAM	Surface-to-Air Missile
NOTAM	Notice to Airman	SAR	Special Access Required
NTC	National Training Center	SFC	Surface
NVD	Night Vision Device	SRB	Safety Review Board
O&M	Operations and Maintenance	SUA	Special-Use Airspace
OHR	Operational Hazard Report	TFR	Temporary Flight Restriction
OSA	Open Skies Airfield	TRACON	Terminal Radar Approach Control
OSIA	On-Site Inspection Agency	TW	Test Wing
OT&E	Operational Test and Evaluation	TS	Test Squadron
POC	Point of Contact	UAV	Unmanned Aerial Vehicle
POE	Point of Entry	UHF	Ultra-High Frequency
PPR	Prior Permission Required	UNLTD	Unlimited
RCC	Range Commanders Council	VFR	Visual Flight Rules
RCF	Radar Control Facility	WAFC	Western Area Frequency Coordinator
RCO	Range Control Officer		
RDT&E	Research, Development,		

Appendix B: Large Scale Exercise Planning Checklist

This checklist helps planners prepare for a large-scale exercise. The guidance is given as follows:

- B.1 At Least 30 Calendar Days from Operations
- B.2 At 14 Calendar Days from Operations
- B.3 At 3 Working Days from Operations
- B.4 At 1 Working Day from Operations

B.1 At Least 30 Calendar Days from Operations

With at least 30 calendar days until your intended operations, you should be on your way to planning the exercise.

B.1.1 Initiate Planning and Coordination

During initial planning and coordination:

1. **Assign a single point-of-contact to represent your mission.** Forward this information to CCF and other concerned agencies.
2. **Provide the Exercise Planner with a copy of this checklist** and attached quick-reference Users Exercise Planning Checklist. These checklists will help planners ensure they get the required coordination and that they meet all exercise data requirements.
3. **Prepare the initial plan.** This information will be used to prepare a briefing sheet to be distributed to TRACON and R-3508 Complex users. Include:
 - Desired airspace areas and altitudes
 - Date and time periods (and backups, if applicable)
 - Basic scenario with ingress/egress routes, tanking, adversary, and control and communication procedures
 - Other information that pertains to operational requirements (i.e., GCI support)

NOTE: Exercises using the R-2508 Complex should include CCF and TRACON as addresses in mission/flight planning messages.

CCF: 2508CCF EDWARDS AFB CA//

TRACON: FAA HIGH DESERT TRACON EDWARDS AFB CA//

B: Large-Scale Exercise Planning Checklist

4. **Ensure all participants are authorized to operate in accordance with R-2508 Complex operating procedures** (see Chapters 2 through 7 of the *R-2508 Complex User's Handbook*).
5. **Determine frequencies to be used** and coordinate with CCF, FAA facilities, and range agencies.
6. **Coordinate check-in/check-out procedures** with appropriate FAA facilities.
7. **Check for other agencies that may require advance coordination** (i.e., FAA ARTCCs, Military representatives to the FAA, Frequency Coordinators). Refer to *R-2508 Complex User's Handbook*.
8. **Call the range facility early to identify range requirements.** Advance notice and information required may vary between scheduling agencies and types of missions. An early call to the appropriate range facility will help.
9. **Coordinate with CCF and required range agencies for basic exercise and range requirements.** Ensure all exercise plan changes are coordinated with appropriate agencies throughout the life of the exercise.
10. **Coordinate check-in/check-out procedures** for the R-2508 Complex in advance with FAA TRACON.
11. If determined necessary by the CCF, **send a brief exercise initial plan to the CCB.** If revisions are required by the CCB, revise the plan and brief the CCB or appointed representative.

B.1.2 Preparing the Plan

When preparing the plan, be sure to include the following:

- R-2508 Complex entry/exit points, altitudes, and routing within the Complex
- Check-in/check-out procedures for the R-2508 Complex
- Tanker locations, altitudes, and frequencies
- AWACS/E-2/designated comm. aircraft location, altitude, and frequency. If no AWACS/E-2 is available, designate a communications aircraft.

NOTE: Communications aircraft must request and receive a Work Area Clearance from TRACON before entering the R-2508 Complex.

- ECM aircraft positions
- Designated ACM areas
- All exercise frequencies, call signs, and squawks

NOTE: Immediately submit changes to CCF. Last-minute changes to the plan may not be approved due to lack of coordination time.

B.1.3 Tips for Initial Planning and Coordination

Avoid the following when planning the exercise:

- Do not place refueling or other anchor/orbit points too close to Complex boundaries. There are three non-published refueling areas available for use within the Complex (see Figure 2-4).
- **Avoid noise sensitive areas, National Parks, and low-altitude routes in these same areas (see Chapter 7 of the *R-2508 Complex User's Handbook*).**
- Do not place anchor points in areas of concentrated activities, such as Owens Dry Lake, Saltdale, or the Trona Corridor.

Your planning and coordination will be smoother if you also keep in mind the following:

- Existing restrictions (such as National Park over-flight altitudes) are in place to help preserve our use of the Complex to fulfill missions and to protect other interests in the area. Do not request deviations to existing restrictions.
- Do not expect to receive segregated airspace outside of the internal restricted areas.
- Do not expect to receive clearance for unrestricted ACM. Generally, ACM can be conducted in Owens, Saline, or Panamint (see Figure 2-4). Unrestricted ACM throughout R-2508 Complex will generally not be approved.
- Expect transit corridor restrictions to be imposed to allow other users access to the work areas without conflicting with exercise ACM activity.

If the exercise activity centers around:

- **R-2505/Coso Range:** Plan on requesting Isabella, Owens, Saline, and/or Panamint. If Panamint is required, plan to conduct ACM north of 36°08'N and remaining west of Telescope Peak (36°08'N and 117°05'W).
- **R-2524:** Request to have ACM activity in Panamint south of 36°08'N and west of Telescope Peak.
- **R-2502N (Leach Lake):** Request ACM activity in Panamint south of 36°08'N and east of Telescope Peak.
- Call or send a message to the scheduling agencies with jurisdiction over planned use restricted areas/ranges and airspace to validate coordinated requirements.

B.2 At 14 Calendar Days from Operations

Within 14 days of planned operations:

1. Have your exercise representative **brief the approved exercise plan in advance to CCF**. Invite range and ATC representatives from China Lake ASC, Edwards AFB SPORT, and JOSHUA, as appropriate.

B.3 At 3 Working Days from Operations

Within 3 working days of your planned operations:

1. Finalize the exercise plan by defining operational requirements in the R-2508 Complex. Coordinate this plan with CCF and request any additional assistance needed.
2. Brief representatives from each participating unit on exercise procedures prior to their strike/tactics planning.
3. Plan to have at least one representative from CCF and appropriate agencies brief participating aircrews on airspace and range procedures and concerns.

B.4 At 1 Working Day from Operations

At least 1 working day before the start of operations, submit final call signs, number and type aircraft, squawks, and changes to CCF.

Changes other than minor (i.e., call sign, number and type aircraft, and time changes) will normally not be accepted after this time.

Appendix C: Mission Planning Checklist

When planning a mission, the mission planner must submit the final form by message, fax, or E-mail. The mission planner is responsible for ensuring that CCF received the plan.

NOTE: Ensure that the information submitted to CCF is complete and accurate for planning and scheduling the exercise. The better you plan, the fewer problems exercise aircraft will likely encounter.

On the form, include the following:

1. **Point of Contact / Mission Planner name and phone number (DSN and commercial).**
 - Identify method of contact (fax number, message address, or e-mail).
 - If POC will not be consistently available, list alternates with corresponding contact information.
2. **Airspace requirements.**

Identify:

- Dates and Times (indicate “Z” [ZULU] or “L” [LOCAL])
- MOAs/ATCAAs and Restricted areas (if for transition only, state “transition only”)
- Altitudes requested
- Tanker areas/tracks for use in or in vicinity of the Complex
- Canned routes, MTRs, and/or entry/exit fixes for ingress/egress

EXAMPLE:

1 MAY 01

R-2508/Isabella/Panamint, 1600–1730 (Z), 0–FL350
R-2524 (SV), 1945–2115 (Z), 0–FL240
R-2515 (GT), 2030–2200 (Z), 0–FL180, Transit only
Isabella Refueling Area, 1500–1615 (Z), FL210–FL250
Ingress / Egress: CHADS / ROSIE

3. **Alternate dates and times requested.**
4. **Number and type aircraft.** List separately by area if not applicable to all areas. Include departure/arrival airports for aircraft.

C: Mission Planning Checklist

5. **Mission Title (i.e., JTFEX 01-1) and Activity Description.** Specify all activities that apply; i.e., tanking, AIC, ACM, bombing, terrain following. Also, answer the following questions:

- **ECM?** If yes, specify:
 - Passive (chaff) or active (jamming)
 - Intended areas and times for use*
- **Comm Ship?** If yes:
 - State type of aircraft and planned orbit location (even if outside of the Complex).
 - Briefly describe the communication scenario i.e., AWACS will keep adversaries on discrete and strike will check in on range frequency.
 - List Comm Ship POC and phone number, if other than the Mission Planner.
 - If the Comm Ship is an AWACS or ARU, separate coordination requirements apply. The POC must directly deal with CCF.
- **ACM?** If yes, identify adversary aircraft and CAP points (areas and altitude).
- **Planned frequency use***
 - Identify any discrete frequencies planned for use in the Complex and requirements for monitoring (see *R-2508 Complex User's Handbook* for inactive/active monitoring).

NOTE: Unless special comm. ship coordination is approved for check-in and/or checkout, individual flights must contact JOSHUA for ingress/egress on appropriate ATC frequency.

- For range use, list planned range frequencies. State if more than one range frequency is needed for simultaneous use (versus just a backup frequency).
- Identify special requirements for frequency coordination. For example, if all Complex ops requested to be worked on one or more discrete or range frequencies, specify what you are asking for. Do not assume that listing frequencies alleviates the need to change frequencies. You must coordinate specifically between affected agencies for use of a single frequency or a set of frequencies.

This request does not relieve the Mission Planner of responsibility to coordinate frequency/ECM requirements through appropriate Frequency or Spectrum Managers

- **Pre-Coordinated Squawks?** For JCS large-scale exercises, Mode 3 codes may be assigned by HQ NORAD. Pre-assigned NORAD discrete codes may be obtained by message at least 30 days before STARTEX, addressed to: HQ NORAD
PETERSON AFB CO//J3OG//

C: Mission Planning Checklist

- **Supersonic Flight?** Refer to *R-2508 Complex User's Handbook* for the policy on shared-use airspace. Expect specific approval for range operations.
 - **Additional Requirements?** Identify flight plans (RTB or NID, VFR or IFR egress), special routing information, GCI (specify requirements), requests for additional briefing material/support.
6. **Specific Range (Internal Restricted Area) Requirements.**
- Range (SV, Baker, George, Coso, Charlie Airfield)
 - Number and type aerial targets
 - Number and type delivery maneuvers (state if captive)
 - Number and type of ordnance for each aircraft (GM-MK/Mod guidance and W/H sections). State if live or inert.
 - Instrumentation requested
 - Impact information requested
 - Aircraft, ground, ordnance positioning requirements
 - Additional range requirements
 - Laser? If yes, describe by range.
 - Supersonic Operations? If yes, state reason for requirement.
 - Any other special activities planned or additional services needed?
7. **Describe mission Concept of Operations, Special Instructions, and/or Mission Scenario as it applies to the R-2508 Complex.** Provide CCF with the Air Tasking Order (ATO) and aircraft call signs immediately upon issuance.
8. **Describe contingency plans and scenario changes due to loss of tanker or AWACS support.** Will one of the mission aircraft act as a Comm ship? Routing coordination for: (insert mission title)

Appendix D: R-2508 Situation Report

R-2508 SITUATION REPORT		DATE RECEIVED:
FROM: (OPTIONAL)	TO: R-2508 Central Coordinating Facility, 100 E. Sparks Dr. Edwards AFB CA 93524-8090 DSN: 527-2508 FAX: DSN 527-4798	DATE OF REPORT:
<p>This form is intended for the reporting of circumstances/services that enhance or degrade the users' mission within the R-2508 Complex. It may be used by aircrews or controllers to submit any constructive information to improve the safety and efficiency of aviation operations in the R-2508 Complex. Identification of the drafter is optional. This form will Not be used to replace reporting of situations that require submission of Hazardous Air Traffic reports (HATR), Operational Air Hazard Reports (OHR), or Near Mid-Air Collision (NMAC) reports. This report should be submitted within 5 days of the incident to ensure availability of the data necessary to analyze the reported situation. The information contained on this form is for <u>MILITARY OFFICIAL USE ONLY</u> and will be used for the exclusive purpose of improving safety and operations within the R-2508 Complex. No punitive or disciplinary action will be taken as a result of statements made on this form.</p>		
DATE/TIME SITUATION OCCURRED:		LOCATION SITUATION OCCURRED:
CALLSIGN(S) / TYPE AIRCRAFT:		OTHER AIRCRAFT INVOLVED:
FREQUENCY(IES):		OTHER CALL SIGN(S) IF KNOWN:
ALTITUDE:		CONTROLLING AGENCY:
<p>NARRATIVE: (Be as complete as possible. Include recommendations to prevent reoccurrence. Add additional sheets as necessary.)</p>		